

Work Order ID 74930

74930

~~U/R~~

Page 1

October 13, 2011 1:04:07 PM

Item ID: D350-748-101

Accept

N9000040100

Setup Start *NS1*

Revision ID: U/R

Stop *NS2*

Item Name: Crosstube Installation, High Fwd

Start Date: 10/13/11 Start Qty: 1.00

1

Cust Item ID:

Required Date: 11/11/11 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: M.L.J

Date: 11/10/13

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|--------------|---------------------------|
| D350-748-141 | <u>U/R</u> OK CP 11.10.17 |

100 DOCUMENT CONTROL 0.00

100

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPPD350-748-101

CHG002

S 12/01/02

for MLS 11-12-21

110 BENDING MACHINE - CROSSTUBES 0.00

110

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

Bend tube as per Dwg D350-748-141 using CNC bender program D350F and Folio FT

SAJ 11-11-10

120 QC15- Crosstube Dimensional Check 0.00

120

QC

Memo

0.00

Quality Control

S 12/11/11

76

| W/O: 14950 | | WORK ORDER CHANGES | | | | | |
|------------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: D350-748-101 PAR #: / Fault Category: X-tube NCR: Yes (No) DQA: / Date: 12/1/11
 Resolution: use as is Disposition: use as is QA: N/C Closed: / Date: 12/1/11

| NCR: 10916 | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------------|------|---|-----------------------------|--|----------------|---------------------------|--------------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| 11.12.13 | 150 | Initial paperwork from cadbreth indicated tube had crack as determined from magnetic particle inspection. Red tag was on another tube (BIN 74924) | CP 11.12.13 Q51842 | <ul style="list-style-type: none"> - Cadbreth investigation indicated BIN 74924 had crack. - BIN 74924 appeared visually to have crack, & LPI CONFIRMED. - LPI indicates that BIN 74930 has no crack. ACCEPTABLE. | 2/4 | S 12/1/12 | CP 11.12.13 Q51842 | S 12/1/12 |
| | | | | | | | | |
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NOTE: Date & initial all entries

Quality Control

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
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NOTE: Date & initial all entries

Work Order ID 74930***74930***

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Item ID: D350-748-101

Accept

N900040100Setup Start ***NS1***

Revision ID: U/R

Stop ***NS2***

Item Name: Crosstube Installation, High Fwd

Start Date: 10/13/11 Start Qty: 1.00

1

Cust Item ID:

Required Date: 11/11/11 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 130 | Crosstubes | 0.00 | | | | | | | |
| *130* | | | | | | | | | |
| Crosstubes | Memo | 0.00 | | | | | | | |
| Crosstubes | 1-Drill Tube as per Dwg D350-748-141 Using DT8876 A,B & C Drill Jigs, Set-up drill table as per QSI 010 | | | | | | | | |
| | 2-Deburr | | | | | | | | |
| | 3-Engrave Part # and Batch # as per Dwg D350-748-141 | | | | | | | | |
| | 4-Remove all marks from tube within limits of D350-748-141 | | | | | | | | |
| | 5- Apply a light coat of LPS3 on the interior of tube Batch: <u>M109956</u> | | | | | | | | |
| 140 | QC5- Inspect part completeness to step on W/O | 0.00 | | | | | | | |
| *140* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | CHECK 10 DEG HOLES WITH DT8876E (EUROCOPTER CLAMP) | | | | | | | | |

| W/O: | | WORK ORDER CHANGES | | | | | |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Work Order ID 74930

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Item ID: D350-748-101 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: U/R Stop ***NS2***
 Item Name: Crosstube Installation, High Fwd
 Start Date: 10/13/11 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 11/11/11 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|-----------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|-----------------------|
| 150 *150* Outsource3 | Outsource process-Cadplate per QSI017 4.1.9.1 | 0.00 | | | | | | | |
| Outsource process - Cad plate | Memo Issue P/O: <u>15462</u> Stress relief at 375° for 5 hours Magnetic Particle Inspect per ASTM E1444 Cadium Plate per AMS-QQ-P-416B, Class 1, Type 2 Embrittle relief at 375° for 8 hours, Chromate Treat Possible Supplier: Southwest United Industries Ensure Certificate of Conformity is attached | 0.00 | | | | | | | <u>R11-11-15</u> ① |
| 160 *160* Packaging | Receive & Inspect for Damage & Mat'l Certs | 0.00 | | | | | | | |
| Packaging | Memo Ensure certificate of conformity is attached | 0.00 | | | | | | | <u>Puff/p/c</u> ④ |
| 160/161 | | | | | | | | | ★SEE W/D CHG ATTACHED |
| 170 *170* QC | QC5- Inspect part completeness to step on W/O | 0.00 | | | | | | | |
| Quality Control | Memo | 0.00 | | | | | | | <u>Suliz/21</u> |

issued P/O for NDT

P/O: 15634

CD 11/2/08 ①

rec'd

Puff/p/c

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

| W/O: | | WORK ORDER CHANGES | | | | | | |
|----------|------|--|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector | |
| 11.10.05 | 161 | LOAD TUBE TO 3500 ^{lb} FOR 1 MINUTE. REF D.S. EMAIL. | | | | CP 11.10.12 PS/072 | | |
| 11.10.05 | 162 | NDT TUBE. | | | | CP 11.10.12 PS/072 | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Chris Provencal

From: David Shepherd <dshepherd@dartaero.com>
Sent: Tuesday, April 27, 2010 3:40 PM
To: 'Mike Petsche'
Cc: 'Bill Beckett'; 'L Lacelle'; 'Chris Provencal'; 'Dan Stow'; ssheldon@dartaero.com
Subject: 350 crosstubes

Mike,

I discussed the 350 crosstube load testing with Bill a little while ago and this plan makes sense to him.

So, my recommendation to clear these crosstubes is to load the fwd crosstubes to 3500 lb and the aft crosstubes to 3000 lb in the deflection test rig and document on the work orders that this test has been completed. Hold max load for 1 minute. Per TP-D350-748-2, these loads represent the maximum load on these crosstubes at gross weight and are below the yield point of the material. I would like to request that Chris Provencal witness these tests and sign off the work orders based on his experience with Dart landing gears. My feeling is that if there is a problem with the parts, it will manifest itself during this load test. I, for one, would feel a lot more confident in testing each crosstube in this manner than relying totally on what Exova has to say. I think it would be very difficult to reach a conclusion on the whole batch on the basis of cracks in two parts from the batch.

I believe that we can accomplish this before next Friday, which also gives us time to hear what Exova has to say in case it has an impact on our decision. So far, what I have seen from Exova shows me that there are fluctuations in the heat treating but the tubes are heat treated to our specification.

For this reason, I believe we should tell DHS that it looks like we will be able to start shipping 350 crosstubes by May 7th pending a successful Engineering test of the material.

David.

Work Order ID 74930

74930

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Item ID: D350-748-101 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: U/R Stop ***NS2***
 Item Name: Crosstube Installation, High Fwd
 Start Date: 10/13/11 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 11/11/11 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 180 | SprayPaint | 0.00 | | | | | | | |
| *180* | | | | | | | | | |
| SprayPaint | Memo | 0.00 | | | | | | | |
| Spray Painting | 1-Prime inside crosstube as per QSI 005 4.2 2-Prime Outside of Tube as per Dart QSI 005 4.2 | | | | | | | | |
| 190 | QC14- Inspect Spray Paint | 0.00 | | | | | | | |
| *190* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | Then, Wrap in plastic bag to protect from scratches | | | | | | | | |
| 200 | Crosstubes | 0.00 | | | | | | | |
| *200* | | | | | | | | | |
| Crosstubes | Memo | 0.00 | | | | | | | |
| Crosstubes | 1-Install Ground wire Insert, then insert screw and washer 2-Install Abrasion strips as per Dwg D350-748-141 & QSI 035. 3-Install supports Using Dt8876 as per Dwg D350-748-141, Torque to 60-80 IN-LBS | | | | | | | | |

21/11-12-19

11-12-20

11-12-20

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

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Quality Control

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Work Order ID 74930

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74930

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Item ID: D350-748-101

Accept

N900040100Setup Start ***NS1***

Revision ID: U/R

Stop ***NS2***

Item Name: Crosstube Installation, High Fwd

Start Date: 10/13/11 Start Qty: 1.00

1

Cust Item ID:

Required Date: 11/11/11 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 240 | Packaging | 0.00 | | | | | | | |
| *240* | | | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | |
| Packaging | Identify and pack for shipping as per PPP D350-748-101 | | | | | | | | |
| | Location: <u>102</u> | | | | | | | | |
| | PPP Rev: <u>C</u> | | | | | | | | |
| 250 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *250* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

12/1/3 50

CK 12/01/04

M.L.J 12/01/03

(1)

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 74930

74930

Parent Item: D350-748-101

D350-748-101

Parent Item Name: Crosstube Installation, High Fwd

Start Date: 10/13/11

Required Date: 11/11/11

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev:A New Issue 06-07-05 JLM
 IPP Rev:B Update qty of MS21042L5 06-09-12 KJ
 IPP Rev:C Rev B 07-11-15 DD
 IPP Rev D Combined manufacturing 08.04.02 EC verified by: DD
 IPP Rev:E 08-06-24 revD as per dwg DD verified by:EC IPP Rev:F
 10.08.04 added QSI010 4.3 DD verf:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|-----------------|-------------|--------------|---------------|----------------|--------|
| D350-748-141TRN | | Manufactured | No | | | 110 | Each | 0.0000 | 1 | 1 | | | |
| *D350-748-141TRN* | | | | | | | | | | | | | |
| Crosstube Turning Detail | | | | | | | | | | | | | |
| ALS4-1032-225 | | Purchased | No | | | 200 | Each | 2,660.000 | 1 | 1 | | | |
| *AI S4-1032-225* | | | | | | | | | | | | | |
| Insert | | | | | | | | | | | | | |
| | | | | <u>Location</u> | | <u>Loc Qty</u> | | <u>Loc Code</u> | | | | | |
| | | | | ST282 | | 2660 | | | | | | | |
| | | | | 108696 | | 808 | | | | | | | |
| | | | | 110768 | | 62 | | | | | | | |
| | | | | 118386 | | 860 | | | | | | | |
| | | | | <u>118966</u> | | 930 | | | | | | | |
| AN960JD10 | NAS1149D0363J | Purchased | No | | | 200 | Each | 0.0000 | 1 | 1 | | | |
| *AN960.ID10* | | | | | | | | | | | | | |
| Washer | | | | | | | | | | | | | |

373577 ** S4D 11-11-10
 11-12-20
 11-12-20

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 74930

Parent Item: D350-748-101

Parent Item Name: Crosstube Installation, High Fwd

74930

D350-748-101

Start Date: 10/13/11

Required Date: 11/11/11

Start Qty: 1.00

Required Qty: 1.00

D2856-400

Manufactured No

200 f

334.8845

1.181

1.243158

D2856-400

Abraison Strip

**

RT 11-12-20

Location

Loc Qty

Loc Code

ST403

0.3149

68076

0.3149

ST409

334.5696

63735

0.6696

71164

117.9

73491

216

X 1.2431

D3502-1

Manufactured No

200 Each

59.0000

2

2

D3502-1

Support

**

RT 11-12-20

Location

Loc Qty

Loc Code

ST063

59

61206

3

64004

10

68951

12

72129

14

73419

20

X2

MS21920-20

Purchased No

200 Each

56.0000

2

2

MS21920-20

Clamp (per MIL-DTL-8783C)

**

RT 11-12-20

Location

Loc Qty

Loc Code

LG050

56

116799

10

118649

46

X2

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

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Work Order ID: 74930

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Parent Item: D350-748-101

D350-748-101

Parent Item Name: Crosstube Installation, High Fwd

Start Date: 10/13/11

Required Date: 11/11/11

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-10

Purchased

No

200

Each

165.0000

1

1

MS27039-1-10

Screw

119531

**

85 11-12-20

Location

Loc Qty

Loc Code

ST291

165

118612

165

AN4-41A

Purchased

No

220

Each

293.0000

8

8

AN4-41A

Bolt

**

[Handwritten signature]

Location

Loc Qty

Loc Code

ST360

293

115108

18

115705

50

116191

50

117619

50

117795

25

118451

50

118838

50

111768 70
117795 10

AN4-6A

Purchased

No

220

Each

6,024.000

16

16

AN4-6A

Bolt

**

10/12/21 (1)

Location

Loc Qty

Loc Code

ST356

1018

118422

118

118628

400

118838

300

119127

200

ST358

6

117514

6

ST516

5000

119017

5000

119017

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Page 4

October 13, 2011 1:04:11 PM

Work Order ID: 74930

74930

Parent Item: D350-748-101

D350-748-101

Parent Item Name: Crosstube Installation, High Fwd

Start Date: 10/13/11

Required Date: 11/11/11

Start Qty: 1.00

Required Qty: 1.00

AN5-32A Purchased No

220 Each 171.0000 4 4

AN5-32A

Bolt

**

118628

Location

Loc Qty

Loc Code

ST339

75

118628

50

118983

25

ST340

96

117872

46

118422

50

AN960JD416 NAS1149D0463J Purchased No

220 Each 0.0000 32 32

AN960.ID416

Washer

**

119078

AN960JD516 NAS1149D0563J Purchased No

220 Each 0.0000 8 8

AN960.ID516

Washer

**

118206

D3500-1 Manufactured No

220 Each 20.0000 4 4

D3500-1

Saddle

**

1121125 376000

Location

Loc Qty

Loc Code

ST424

20

66127

8

68947

12

October 13, 2011 1:04:11 PM

Shop Packet Print

Page 4

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Page 5

October 13, 2011 1:04:11 PM

Work Order ID: 74930

74930

Parent Item: D350-748-101

D350-748-101

Parent Item Name: Crosstube Installation, High Fwd

Start Date: 10/13/11

Required Date: 11/11/11

Start Qty: 1.00

Required Qty: 1.00

D3501-1

Manufactured No

220

Each

213.0000

16

16

73391

Lu

D3501-1

Bushing

Location

Loc Qty

Loc Code

ST063

202

68939

102

70682

100

ST066

11

67757

11

MS21042L4

Purchased

No

220

Each

14,231.00

24

24

10/12/21 @

MS21042L4

Nut

Location

Loc Qty

Loc Code

ST300

3231

117441

51

117601

557

117885

56

118451

1567

118927

1000

ST516

6000

119017

6000

ST518

5000

119075

5000

119017

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|--------------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Page 6

October 13, 2011 1:04:11 PM

Work Order ID: 74930

74930

Parent Item: D350-748-101

D350-748-101

Parent Item Name: Crosstube Installation, High Fwd

Start Date: 10/13/11

Required Date: 11/11/11

Start Qty: 1.00

Required Qty: 1.00

MS21042L5

Purchased

No

220

Each

2,574.000

4

4

MS21042L5

Nut

**

10/11/2011

Location

Loc Qty

Loc Code

ST300

1074

116105

5

116548

53

117441

138

117611

82

118179

496

118910

300

ST518

1500

119109

1500

118910

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

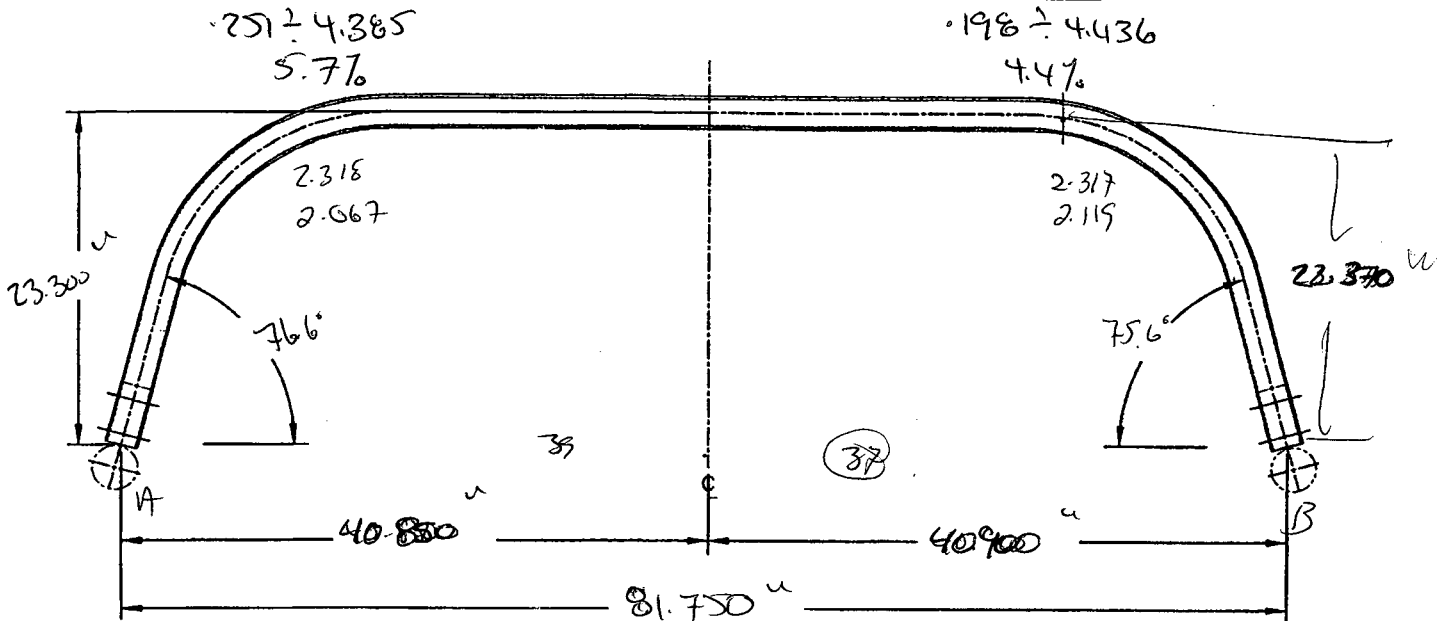
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

| | | | |
|---|--------|--------------|--------------|
| DART AEROSPACE LTD | | Work Order: | 74930 |
| Description: Crosstube High Fwd (AS350/355) | | Part Number: | D350-748-101 |
| Inspection Dwg: D350-748-141 | Rev: E | Page 1 of 1 | |

| Required Dimension | Min | Max |
|--------------------|-------|-------|
| Height | 23.13 | 23.37 |
| 1/2 Span | 40.78 | 41.02 |
| Angle | 75 | 77 |
| Total Span | 81.56 | 82.04 |



| Comments |
|---------------------------------|
| twist 20.069" |
| Side A = 5.7% crush @ 39 Passes |
| Side B = 4.4% crush @ 37 Passes |

| | |
|-----------------|----------|
| QC15 Inspection | S |
| Date | 11/11/08 |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|-----------------|------------|----------|
| A | 07.02.06 | New Issue | KJ/JM | |
| B | 10.08.23 | Dwg Rev updated | KJ | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

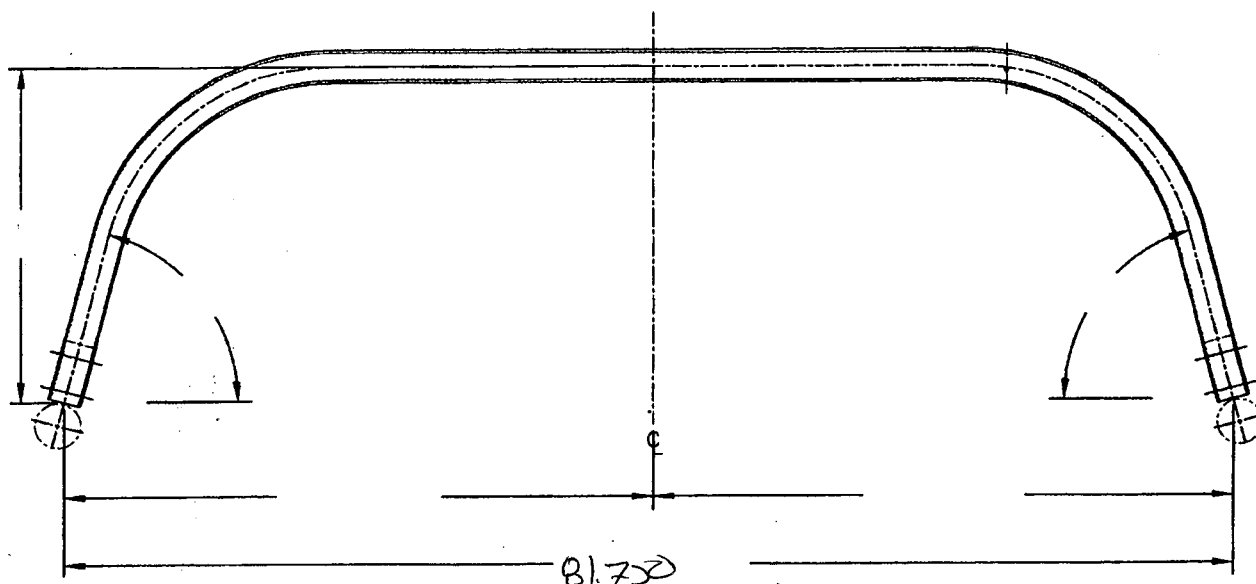
| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

| | | |
|--|---------------------|---------------------|
| DART AEROSPACE LTD | Work Order: | |
| Description: Crosstube High Fwd (AS350/355) | Part Number: | D350-748-101 |
| Inspection Dwg: D350-748-141 Rev: F | | Page 1 of 1 |

For stress Relief only

| Required Dimension | Min | Max |
|--------------------|-------|-------|
| Height | 23.13 | 23.37 |
| 1/2 Span | 40.78 | 41.02 |
| Angle | 75 | 77 |
| Total Span | 81.56 | 82.04 |



| Comments |
|----------------------|
| <i>twist = 0.069</i> |
| |
| |
| |

| | |
|-----------------|--|
| QC15 Inspection | |
| Date | |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|-----------------|------------|----------|
| A | 07.02.06 | New Issue | KJ/JM | |
| B | 10.08.23 | Dwg Rev updated | KJ | |
| C | 11.11.07 | Dwg Rev updated | KJ | |

| Item | Qty -141 | Part Number | Description |
|------|-------------|---------------|--|
| 1 | X | D350-748-141 | CROSSTUBE ASSEMBLY (AS 350/355 HI FWD) |
| 2 | 1 | D6015-125 | CROSSTUBE (OR D6017-115) |
| 3 | 2 | D3502-1 | SUPPORT |
| 4 | 2 | D2856-400-710 | ABRASION STRIP |
| 5 | 1 | AELS-1032-225 | INSERT |
| 6 | 1 | NAS1149D0363J | WASHER (OR AN960JD10) |
| 7 | 2 | MS21920-20 | CLAMP (PER DART SPEC. M-MS21920-20) |
| 8 | 1 | MS27039-1-10 | SCREW |

GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6015-125 OR D6017-115
FINISHED LENGTH = 110.270±0.06
- 2) FINISH: MAGNETIC PARTICLE INSPECT PER DART QSI 038 4.2
CADMIUM PLATE PER AMS-QQ-P-416B, CLASS 1, TYPE II
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: DART PART NUMBER "D350-748-141" AND BATCH NUMBER ON INSIDE OF CUFF
PER DART QSI 044 6.4 (VIBRATING STYLUS)
- 7) WEIGHT: 30.45 lbs
- 8) PART IS SYMMETRIC ABOUT CENTERLINE, EXCEPT FOR Ø0.297 HOLE.
- 9) BLEND OUT ALL EDGES FROM MACHINING LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
NOTE: ALL HOLES ARE DRILLED AFTER BENDING.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 7 PASSES. MAXIMUM TUBE FLATTENING DUE TO
BENDING IS 6% BASED ON O.D.
- 11) HEAT TREAT TO MIN. 180 KSI PER MIL-T-6736 OR AMS 2759-1C AFTER TURNING. ACCEPTABLE TO
VERIFY TENSILE STRENGTH BY HARDNESS TEST PER ASTM E18 TO 40-45 HRC.
- 12) INSTALL D2856-400-710 ABRASION STRIPS WITH A GAP ON BOTTOM SIDE OF CROSSTUBE,
CENTERED OPPOSITE D3502-1 SUPPORT, PER QSI 035.
- 13) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE
OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES,
NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY.
CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE. WHEN DRILLING HOLES EXTREME CARE
MUST BE TAKEN AND CAREFUL DEBURRING PERFORMED TO ENSURE A CLEAN HOLE WITH NO
CRACKING/CHIPPING/GROOVES.
- 14) TORQUE CLAMPS 60 TO 80 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT
NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.
- 15) MAX TWIST AFTER BENDING: WITH XTUBE LAYED FLAT ON SURFACE, THE DIFFERENCE BETWEEN
CUFF HEIGHTS FROM THE SURFACE MAY BE NO LARGER THAN 0.25 (ZN C1-3).

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. ~~74930~~ M.C.J.
34930 11/10/12
OK 11/16/12
UNDER REVIEW
11/16/12

RELEASED
2011-01-18
MM

| | | | |
|------------|---|----|----------|
| F | ADD HRC TEST OPTION (B8-1) PER PAR 09-040, ADD TWIST LIMIT (A8-1, C1-3), ADD D6015-125 OPTION (C8-1), STOCK DIM NOW MACHINED (D1-4) | CP | 10.11.23 |
| E | REVISE GENERAL NOTES; UPDATE TO CURRENT ADD STANDARDS; RELOCATED FLAG #6 PER PAR 08-048 (ZN A6-3); TOLERANCES (ZN C8-3, D1-3) | RF | 09.09.30 |
| D | MAG. PARTICLE AND CAD PLATE AS MFD. | CP | 06.10.31 |
| C | ADD CAD PLATING | CP | 06.08.14 |
| B | ADD D6017-115 & PRIME AND PAINT | CP | 06.06.30 |
| A | NEW ISSUE | CP | 06.03.31 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | | | |
| DRAWN | | | |
| CHECKED | | | |
| MFG. APPR. | | | |
| APPROVED | | | |
| DE APPR. | | | |
| DATE | 10.11.23 | | |

| | |
|--|------------------------|
| DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWING NO. D350-748-141 | REV. F SHEET 1 OF 4 |
| TITLE CROSSTUBE (AS 350/355 HI FWD) | SCALE NTS |
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| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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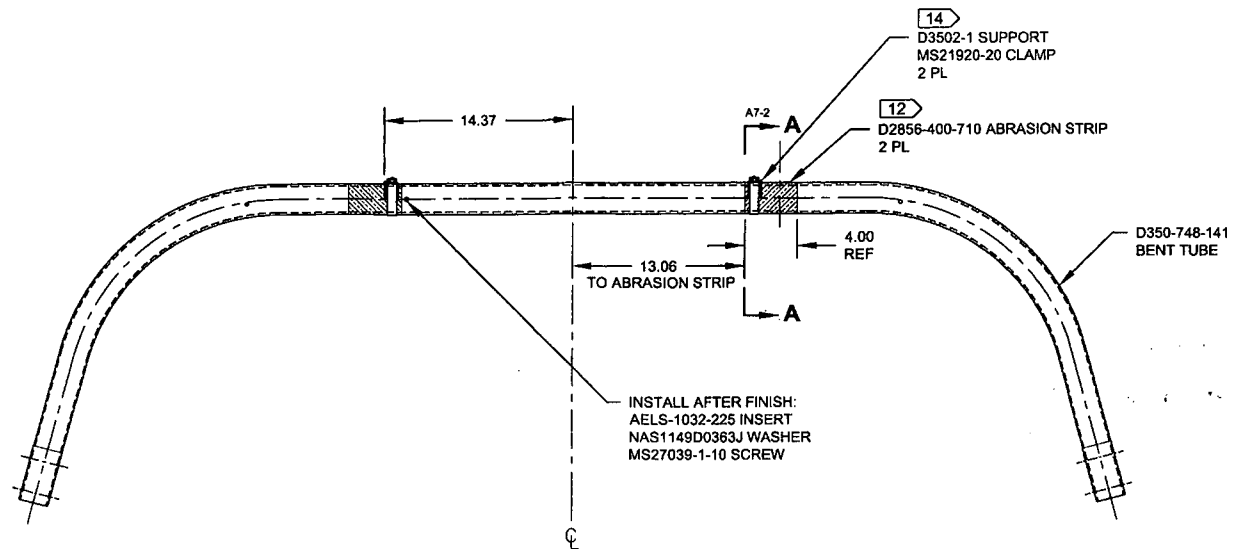
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

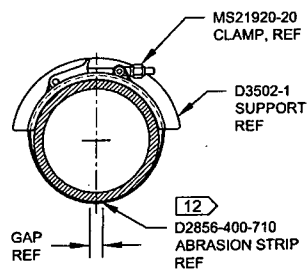
| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

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**D350-748-141
 ASSEMBLY DETAIL**



SECTION A-A D4-2
 SCALE 4X

UNDER REVIEW

CP 11.07.11

RELEASED
 2011-01-08

| | | | |
|------------|----------|---|--------------|
| DESIGN | | DART AEROSPACE LTD | |
| DRAWN | | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | | DRAWING NO. | REV. F |
| MFG. APPR. | | D350-748-141 | SHEET 2 OF 4 |
| APPROVED | | TITLE | SCALE |
| DE APPR. | | CROSSTUBE (AS 350/355 HI FWD) | NTS |
| DATE | 10.11.23 | <small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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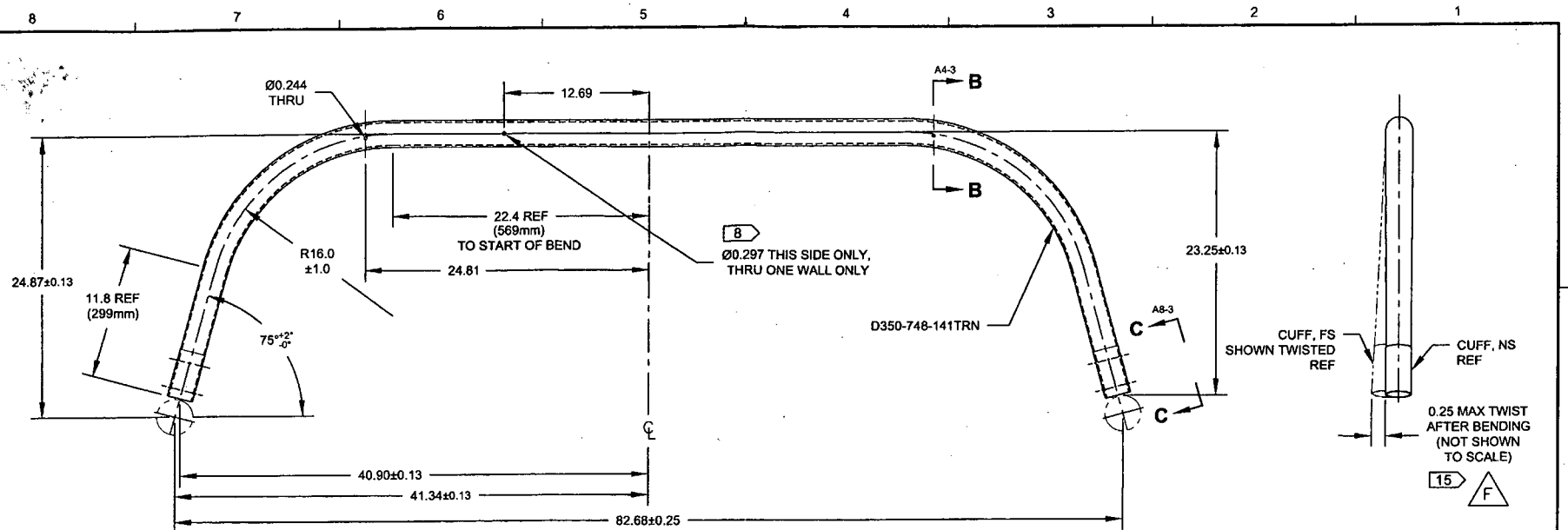
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

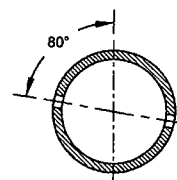
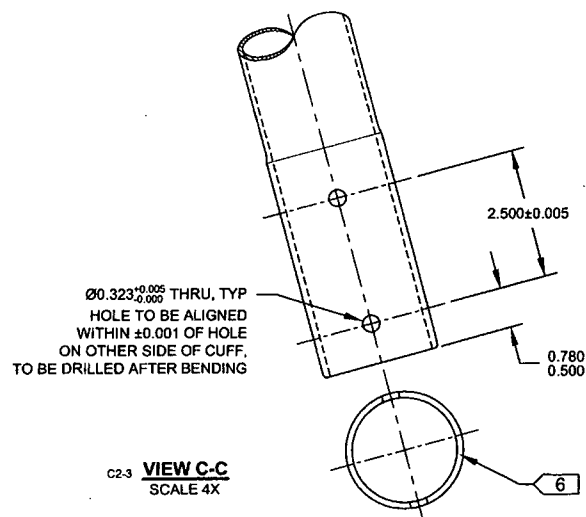
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

74930
 2000



D350-748-141
BENDING AND DRILLING DETAIL 10



SECTION B-B D3-3
 SCALE 4X

UNDER REVIEW

RELEASED
 2011-01-18

| | | | |
|------------|----------|---|--------------|
| DESIGN | DP | DART AEROSPACE LTD | |
| DRAWN | DP | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | B | DRAWING NO. | REV. F |
| MFG. APPR. | 3 | D350-748-141 | SHEET 3 OF 4 |
| APPROVED | 4 | TITLE | SCALE |
| DE APPR. | 4 | CROSSTUBE (AS 350/355 HI FWD) | NTS |
| DATE | 10.11.23 | COPYRIGHT © 2006 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> | |

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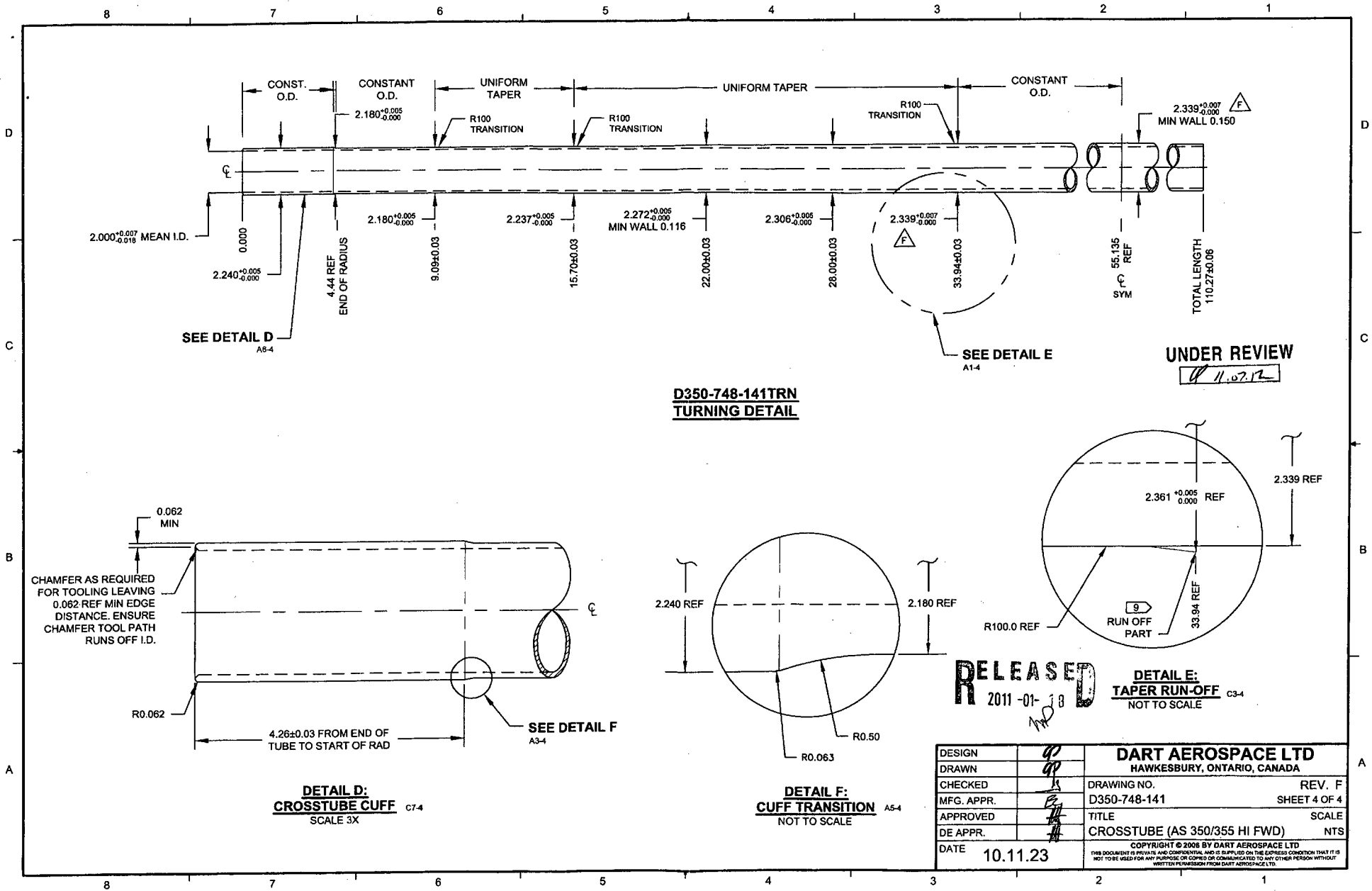
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NOTE: Date & initial all entries

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| W/O: | | WORK ORDER CHANGES | | | | | |
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NOTE: Date & initial all entries

CADORATH GROUP
NON CONFORMANCE REPORT

CADORATH AEROSPACE ☐
CADORATH COATING ☒

CADORATH DISTRIBUTION ☐
UNIFLYTE ☒

NOTE: THIS FORM MUST BE COMPLETED BY: CUSTOMER ☒ VENDOR ☐ BEFORE PROCESSING OF PART(S)

NCR#: **C1110**

CUSTOMER: ☒ **Dart Aerospace Ltd.**

DATE: **11/28/11**

VENDOR: ☐ **N/A**

CADORATH/UNIFLYTE P/O #:

N/A

PART DESCRIPTION: **Skid (Crosstube)**

CADORATH/UNIFLYTE W/O #:

109688

CUSTOMER P/O #: **PO 15462**

PART #: **d350-748-101**

SERIAL #: **B74930** QUANTITY: **ONE (1)**

PURCHASE ORDER INSTRUCTIONS: **Cadmium Plate**

DISCREPANCY: **This part failed our MPI test after plating. It was found cracked by the edge of the hole where the tag is attached. We have stopped processing this part and would like to send this part back for your evaluation.**

Nick Wasylik (QA Manager)

CADORATH/UNIFLYTE INSPECTION DEPARTMENT



CUSTOMER: ☒

PLEASE COMPLETE THIS PORTION, SIGN AND RETURN TOP COPY OF THIS FORM TO CADORATH/UNIFLYTE

VENDOR: ☐

DATE: **11/28/11**

P/O: **PO 15462**

CUSTOMER INSTRUCTIONS: ☐

ATTENTION: Chantal Lavoie

VENDOR CORRECTIVE ACTION: ☐

As per my email to you, we will return this part for your evaluation.

AUTHORIZED SIGNATURE

NAME AND TITLE

DATE: 10/13/10

FORM: OPS 097
REVISION: 3



LIQUID PENETRANT TEST REPORT

P- 12242

PAGE 1 OF 1

CLIENT DART AerospaceDATE Dec 7, 2011TIME AM ☒ PM ☐ATTENTION LindaACUREN JOB NO. 188-11-02400ADDRESS 1270 ABERDEEN STPO/VO No. -HAWKES BAY, O.N.WORK LOCATION SAMEACCEPTANCE STD ASTM 1417/01-03 REV./DATE 2005PROJECT F.P.I. O.NITEM(S) EXAMINED A WET FLUORESCENT LIQUID PENETRANT INSPECTION WAS CARRIED OUT 100% EXTERNAL

JOB DESCRIPTION

PROCEDURE NO. LT-002 REV./DATE 2008TECHNIQUE NO. LT-002 REV./DATE 2008PART NO. SEE RESULTSMATERIAL ALUMINUM THICKNESS VARIOUSSCOPE 10 CROSS TUBES, 2 ENGINE MOUNTS

TEST DETAILS

| | | | | | |
|-------------------|---|-------------------------------------|---|--|--|
| METHOD | <input checked="" type="checkbox"/> FLUORESCENT | <input type="checkbox"/> VISIBLE | <input checked="" type="checkbox"/> WATER WASH | <input type="checkbox"/> SOLVENT REMOVABLE | <input type="checkbox"/> POST EMULSIFIED |
| FAMILY BRAND | <u>LAGNAFLUX</u> | | BLACK LIGHT S/N <u>18459</u> | <input type="checkbox"/> OUTPUT > 1000 μ W/cm ² | <input type="checkbox"/> AMBIENT < 2 fc |
| PENETRANT | <u>2UG2</u> | MINIMUM DWELL TIME <u>45</u> MIN. | LIGHTING EQUIP. <input type="checkbox"/> FLASHLIGHT <input type="checkbox"/> TROUBLELIGHT | <input type="checkbox"/> OUTPUT > 100 fc @ SURFACE | |
| PENETRANT REMOVER | <u>HFO</u> | MINIMUM DRY TIME <u>>10</u> MIN. | OTHER <u>LABISO</u> | | |
| DEVELOPER | <u>SKO S.2</u> | MINIMUM DWELL TIME <u>10</u> MIN. | LIGHT METER S/N <u>1090866</u> | CAL DUE DATE <u>FEB 12 2012</u> | |
| DEVELOPER TYPE | <input checked="" type="checkbox"/> NON AQUEOUS | <input type="checkbox"/> AQUEOUS | <input type="checkbox"/> DRY | | |

TEST SURFACE

| | | | | | |
|---------------------|--|------------------------------------|--|---------------------------------------|--|
| SURFACE CONDITION | <input type="checkbox"/> AS GROUND | <input type="checkbox"/> AS WELDED | <input checked="" type="checkbox"/> MACHINED | <input type="checkbox"/> SHOT BLASTED | <input type="checkbox"/> CLEAN BARE METAL |
| SURFACE TEMPERATURE | <input checked="" type="checkbox"/> < -4°C/ 20°F | | <input type="checkbox"/> -4°C/ 20°F TO 10°C/50°F | | <input type="checkbox"/> 10°C/50°F TO 52°C/125°F |
| | | | | | <input type="checkbox"/> > 52°C/125°F |

RESULTS-

☒ METRIC ☐ IMPERIAL

1 ENGINE MOUNT #73732 ✓
1 - CROSS TUBE W.O. 75831 ✓
1 - CROSS TUBE W.O. 75830 ✓
1 ENGINE MOUNT #73731 ✓
1 - CROSS TUBE W.O. 77109 ✓
1 - CROSS TUBE W.O. 77108 ✓
1 - CROSS TUBE W.O. 77128 ✓
1 - CROSS TUBE W.O. 77290 ✓
1 - CROSS TUBE W.O. 77271 ✓
1 - CROSS TUBE W.O. 77930 ✓
1 - CROSS TUBE W.O. 77124 ✓
1 - CROSS TUBE W.O. 77667 ✓

- RETROUND

- RETROUND

- RETROUND

- TARE IN DRILL HOLE

- NOTE & RETROUND

Scope of Services

The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

Standard of Care

In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

SIGNATURES

CLIENT REPRESENTATIVE

Jan Tittley

PRINT

SIGNATURE

DTR # E90917

TECHNICIAN (SIGNATURE):

Mike Iltis1ST TECHNICIAN2ND TECHNICIAN

NAME (PRINT):

CGSB LEVEL ISNT LEVEL IICGSB LEVEL -SNT LEVEL -CGSB REG. NO. 6606CGSB REG. NO. -

REPORT

REVIEWED BY:

NAME

INITIALS

WHITE - CLIENT COPY

CANARY - OFFICE COPY

PINK - TECHNICIAN COPY

GOLD - OFFICE COPY

PT Sept 2005

**CERTIFICATE OF
CONFORMANCE**

**CADORATH PLATING CO. LTD.
2150 LOGAN AVENUE
WINNIPEG, MANITOBA R2J-0J1**

DATE: Dec-12-2011

CONSIGNED TO: Dart Aerospace Ltd.
1270 Aberdeen St.
Hawksbury, ON K6A 1K7

W/O #: 109688

INVOICE #: 58081

**CONTRACT OR
PURCHASE ORDER #** 15462

DESCRIPTION: SKID

QTY 1

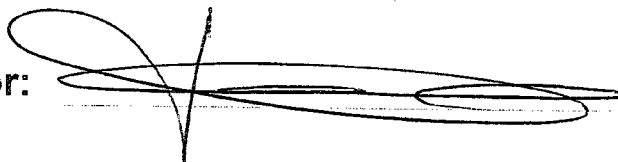
P/N # d350-748-101

S/N # B74930

STRESS RELIEVE BAKE HEAT CHART # 11-1209. MPI MIAW ASTM-E-1444. CADMIUM PLATE IAW AMS-QQ-P-416C TYPE 2 YELLOW CLASS 2. BAKE HEAT CHART # 11-1236.

CERTIFICATE: I certify that the items indicated here on have been inspected and tested and conform to all specifications and requirements detailed on the contract or purchase order.

Approved Inspector:



Packing Slip



Cadorath Coating

2150 Logan Avenue, Winnipeg, Manitoba R2R-0J2

Phone: (204) 633-9420 Fax: (204) 633-8033

INVOICE NUMBER:

58081

Sold To:

Dart Aerospace Ltd.

1270 Aberdeen St.

Hawksbury, ON K6A 1K7

ShipTo:

Net 2% Interest Per Month charged on Overdue Accounts.

Any claims for shortages, overcharges, or damaged goods must be made within seven (7) days from receipt of goods.

| | | | | | |
|--------------------------|-----------------------|---------------|-------------------|------------------|-------------------|
| Customer Order #: | Date Received: | Terms: | G.S.T. #: | Ship Via: | Ship Date: |
| 15462 | Nov-21-2011 | NET 30 DAYS | 10071 6547 RT0001 | | Dec-12-2011 |

| Item # | Qty | P/N & Description |
|--------|-----|-------------------|
|--------|-----|-------------------|

| | | | |
|---|------|------------------|------------|
| 1 | 1 EA | SKID | S/N B74930 |
| | | P/N d350-748-101 | W/O 109688 |

CADORATH GROUP
NON CONFORMANCE REPORT

CADORATH AEROSPACE ☐

CADORATH DISTRIBUTION ☐

CADORATH COATING ☒

UNIFLYTE ☐

NOTE: THIS FORM MUST BE COMPLETED BY: CUSTOMER ☒ VENDOR ☐ BEFORE PROCESSING OF PART(S)

NCR#: **C1110**

CUSTOMER: ☒ **Dart Aerospace Ltd.**

DATE: **11/28/11**

VENDOR: ☐ **N/A**

CADORATH/UNIFLYTE P/O #:

N/A

PART DESCRIPTION: **Skid (Crosstube)**

CADORATH/UNIFLYTE W/O #:

109688

CUSTOMER P/O #: **PO 15462**

PART #: **d350-748-101**

SERIAL #: **B74930**

QUANTITY: **ONE (1)**

PURCHASE ORDER INSTRUCTIONS: **Cadmium Plate**

DISCREPANCY: **This part failed our MPI test after plating. It was found cracked by the edge of the hole where the tag is attached. We have stopped processing this part and would like to send this part back for your evaluation.**

Nick Wasyluk (QA Manager)

CADORATH/UNIFLYTE INSPECTION DEPARTMENT

CUSTOMER: ☒

PLEASE COMPLETE THIS PORTION, SIGN AND RETURN TOP COPY OF THIS FORM TO CADORATH/UNIFLYTE

VENDOR: ☐

DATE: **11/28/11**

P/O: **PO 15462**

CUSTOMER INSTRUCTIONS: ☐

ATTENTION: Chantal Lavoie

VENDOR CORRECTIVE ACTION: ☐

As per my email to you, we will return this part for your evaluation.

THIS HAS BEEN CANCELLED December 12, 2011, N.W.

AUTHORIZED SIGNATURE

NAME AND TITLE

DATE: 10/13/10

FORM: OPS 097

REVISION: 3

CADORATH GROUP NON CONFORMANCE REPORT

CADORATH AEROSPACE ☐

CADORATH DISTRIBUTION ☐

CADORATH COATING ☒

UNIFLYTE ☐

NOTE: THIS FORM MUST BE COMPLETED BY: CUSTOMER ☒ VENDOR ☐ BEFORE PROCESSING OF PART(S)

NCR#: C1110

DATE: 11/28/11

CUSTOMER: ☒ Dart Aerospace Ltd.

VENDOR: ☐ N/A

PART DESCRIPTION: Skid (Crosstube)

CUSTOMER P/O #: PO 15462

PART #: d350-748-101

SERIAL #: B74930

QUANTITY: ONE (1)

PURCHASE ORDER INSTRUCTIONS: Cadmium Plate

DISCREPANCY: This part failed our MPI test after plating. It was found cracked by the edge of the hole where the tag is attached. We have stopped processing this part and would like to send this part back for your evaluation.

Nick Wasylik (QA Manager)

CADORATH/UNIFLYTE INSPECTION DEPARTMENT

CUSTOMER: ☒

VENDOR: ☐

PLEASE COMPLETE THIS PORTION, SIGN AND RETURN TOP COPY OF THIS FORM TO CADORATH/UNIFLYTE

DATE: 11/28/11

P.O. PO 15462

CUSTOMER INSTRUCTIONS: ☐

VENDOR CORRECTIVE ACTION: ☐

ATTENTION: Chantal Lavoie

As per my email to you, we will return this part for your evaluation.

AUTHORIZED SIGNATURE

NAME AND TITLE

DATE: 10/13/10

FORM: OPS 097
REVISION: 3

CERTIFICATE OF
CONFORMANCE

CADORATH PLATING CO. LTD.
2150 LOGAN AVENUE
WINNIPEG, MANITOBA R2J-0J1

DATE: Nov-25-2011

CONSIGNEE TO: Dart Aerospace Ltd.
1270 Aberdeen St.
Hawksbury, ON K6A 1K7

W/O #:

109692

INVOICE #:

57840

CONTRACT OR
PURCHASE ORDER # 15462

DESCRIPTION: SKID

QTY

1

P/N # d350-748-101

S/N # B74924

STRESS RELIEVE BAKE HEAT CHART #11-1209. MPI IAW ASTM-E-1444. CADMIUM PLATE IAW AMS-QQ-P-416C TYPE 2 YELLOW CLASS 2. BAKE HEAT CHART # 11-1236.

Notes: This was the cracked part (Wrong Part Identified)

~~CANCELLED~~

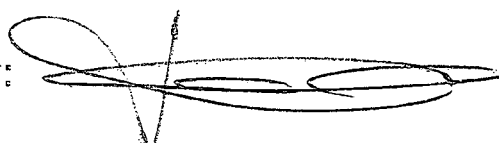
12/12/11
p.m.

CI 14

CI 14

CERTIFICATE: I certify that the items indicated here on have been inspected and tested and conform to all specifications and requirements detailed on the contract or purchase order.

Approved Inspector:



CAI 06